NETWORK INTERFACE DEVICE THAT FAST-PATH PROCESSES SOLICITED SESSION LAYER READ COMMANDS

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ABSTRACT OF THE DISCLOSURE

A network interface device connected to a host provides hardware and processing mechanisms for accelerating data transfers between the host and a network. Some data transfers are processed using a dedicated fast-path whereby the protocol stack of the host performs no network layer or transport layer processing. Other data transfers are, however, handled in a slow-path by the host protocol stack. In one embodiment, the host protocol stack has an ISCSI layer, but a response to a solicited ISCSI read request command is nevertheless processed by the network interface device in fast-path. In another embodiment, an initial portion of a response to a solicited command is handled using the dedicated fast-path and then after an error condidtion occurs a subsequent portion of the response is handled using the the slow-path. The interface device uses a command status message to communicate status to the host.